NPS-AM-06-059



OF THE

THIRD ANNUAL ACQUISITION RESEARCH SYMPOSIUM

BUILDING COLLABORATIVE CAPACITY IN THE INTERAGENCY CONTEXT

Published: 30 April 2006

by

Gail Fann Thomas, Erik Jansen and Susan Page Hocevar

3rd Annual Acquisition Research Symposium of the Naval Postgraduate School:

Acquisition Research: Creating Synergy for Informed Change

May 17-18, 2006

Approved for public release, distribution unlimited.

Prepared for: Naval Postgraduate School, Monterey, California 93943



maintaining the data needed, and c including suggestions for reducing	lection of information is estimated to ompleting and reviewing the collect this burden, to Washington Headqu uld be aware that notwithstanding an DMB control number.	ion of information. Send comments arters Services, Directorate for Info	s regarding this burden estimate ormation Operations and Reports	or any other aspect of the s, 1215 Jefferson Davis	nis collection of information, Highway, Suite 1204, Arlington	
1. REPORT DATE 30 APR 2006		2. REPORT TYPE		3. DATES COVE 00-00-2000	ERED 6 to 00-00-2006	
4. TITLE AND SUBTITLE			5a. CONTRACT NUMBER			
Building Collaborative Capacity in the Interagency Context			5b. GRANT NUMBER			
				5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)				5d. PROJECT NUMBER		
			5e. TASK NUMBER			
				5f. WORK UNIT	NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School, Graduate School of Business & Public Policy, 555 Dyer Rd, Monterey, CA, 93943				8. PERFORMING ORGANIZATION REPORT NUMBER		
2. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) 10. SPONSOR/MONITOR'S ACC			ONITOR'S ACRONYM(S)			
				11. SPONSOR/M NUMBER(S)	ONITOR'S REPORT	
12. DISTRIBUTION/AVAIL Approved for publ	ABILITY STATEMENT ic release; distributi	on unlimited				
13. SUPPLEMENTARY NO	OTES					
14. ABSTRACT						
15. SUBJECT TERMS						
16. SECURITY CLASSIFIC	ATION OF:	17. LIMITATION OF 18. NUMBER 19a. NAME OF ABSTRACT OF PAGES RESPONSIBLE PER:			19a. NAME OF RESPONSIBLE PERSON	
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	17		

Report Documentation Page

Form Approved OMB No. 0704-0188 The research presented at the symposium was supported by the Acquisition Chair of the Graduate School of Business & Public Policy at the Naval Postgraduate School.

To request Defense Acquisition Research or to become a research sponsor, please contact:

NPS Acquisition Research Program
Attn: James B. Greene, RADM, USN, (Ret)
Acquisition Chair
Graduate School of Business and Public Policy
Naval Postgraduate School
555 Dyer Road, Room 332
Monterey, CA 93943-5103

Tel: (831) 656-2092 Fax: (831) 656-2253

E-mail: jbgreene@nps.edu

Copies of the Acquisition Sponsored Research Reports may be printed from our website www.acquisitionresearch.org

Conference Website: www.researchsymposium.org



Proceedings of the Annual Acquisition Research Program

The following article is taken as an excerpt from the proceedings of the annual Acquisition Research Program. This annual event showcases the research projects funded through the Acquisition Research Program at the Graduate School of Business and Public Policy at the Naval Postgraduate School. Featuring keynote speakers, plenary panels, multiple panel sessions, a student research poster show and social events, the Annual Acquisition Research Symposium offers a candid environment where high-ranking Department of Defense (DoD) officials, industry officials, accomplished faculty and military students are encouraged to collaborate on finding applicable solutions to the challenges facing acquisition policies and processes within the DoD today. By jointly and publicly questioning the norms of industry and academia, the resulting research benefits from myriad perspectives and collaborations which can identify better solutions and practices in acquisition, contract, financial, logistics and program management.

For further information regarding the Acquisition Research Program, electronic copies of additional research, or to learn more about becoming a sponsor, please visit our program website at:

www.acquistionresearch.org

For further information on or to register for the next Acquisition Research Symposium during the third week of May, please visit our conference website at:

www.researchsymposium.org

THIS PAGE INTENTIONALLY LEFT BLANK



Building Collaborative Capacity in the Interagency Context

Presenter: Gail Fann Thomas, is an associate professor in the Graduate School of Business and Public Policy at the Naval Postgraduate School. She received an EdD at Arizona State University in Business and Education in 1986. She currently teaches strategic communication in the MBA program at NPS and in the Navy's Corporate Business Program. Since arriving at NPS in 1989, she has been involved in a numerous research projects that focus on management and leadership communication dilemmas.

Presenter: Erik Jansen, is a senior lecturer in the Graduate School of Operations and Information Sciences at the Naval Postgraduate School. In 1987, he received his PhD from the University of Southern California in organization and management. He currently teaches organizational theory and design and command and control. His research has been in the area of organizational design, emphasizing organizational reward systems and careers in the context of innovation.

Presenter: Susan Page Hocevar, is an associate professor in the Graduate School of Business and Public (GSBPP) at the Naval Postgraduate School. She received her PhD in organization and management at University of Southern California in 1989. She currently teaches courses in organizational behavior, negotiation and consensus building for programs in GSBPP, the NPS School of International Graduate Studies, and the NPS Defense Analysis program as well as the Navy's executive Corporate Business program. Her research programs currently include the ONR-sponsored Adaptive Architectures for Command and Control and inter-organizational collaboration.

Gail Fann Thomas Susan Page Hocevar Graduate School of Business & Public Policy Naval Postgraduate School 555 Dyer Rd. Monterey, CA 93943 831-656-2249 shocevar@nps.edu 831-656-2756 gthomas@nps.edu

Erik Jansen Graduate School of Operations and Information Sciences Naval Postgraduate School 555 Dyer Road Monterey, CA 93943 831-656-2623 ejansen@nps.edu

Abstract

Federal Acquisition Reform has consistently called for more and better collaboration among participating organizations. Experience shows, however, that inter-organizational collaboration can be difficult at best. Our research focuses on imperatives of successful collaboration and aims to assist organizations in diagnosing their collaborative capacity. Based on prior research with homeland security, we offer a model of inter-organizational collaborative capacity grounded in a systems perspective. We then offer enablers and barriers that contribute to collaborative capacity. Finally, we describe how the ability to diagnose



collaborative capacity encourages literacy around collaboration and assists leaders in determining capabilities that the organization must develop to be successful in developing collaborative capacity.

Introduction

Complex inter-organizational collaboration is characterized by high task uncertainty, multiple participants, virtual communication and diverse organizational goals. As organizations increase their dependence on one another and attempt to increase their performance, interorganizational collaboration is viewed by many as an imperative. In the federal government, for instance, the Federal Acquisition Reform has consistently called for more and better collaboration among participating organizations. Partnering, Alpha Contracting, and Delta Contracting are but a few examples of innovative arrangements that currently are being used to increase inter-organizational collaboration among agencies.

In government and industry, collaboration is on the rise because it has been found to reduce litigation, decrease costs, and increase innovation (Mankin, Cohen, & Fitzgerald, 2004). Accordingly, some organizations have developed mature partnering arrangements or alliances and have demonstrated that these arrangements can save millions of dollars and significantly reduce cycle-time. Other organizations have not yet positioned themselves to leverage the benefits of collaborative relationships.

Our research focuses on imperatives of successful collaboration and aims to assist organizations in diagnosing their collaborative capacity. Diagnosing collaborative capacity encourages literacy around collaboration and assists leaders in determining capabilities that the organization must develop to be successful. This paper describes what we mean by the term "collaborative capacity," explains key factors for successful collaboration, and shows how our diagnostic tool can leverage learning for an organization.

When is collaboration most beneficial?

Collaboration is most beneficial when organizations are interdependent and rely on each other to achieve a common goal or task. This reliance provides an opportunity for organizations to coordinate their work and find ways to work well with one another. While collaboration appears on the surface to be an obvious solution, experience shows that organizations commonly fail when they attempt to build collaborative relationships. Among the reasons for ineffective collaboration are: diverse missions, goals and incentives that conflict with one another; histories of distrust that are hard to alter; leaders who do not actively support collaborative efforts; and the lack of coordination systems and structures needed to support collaborative efforts (US Government Accountability Office, December 2002). Hurricane Katrina relief was a dramatic example of the consequences of failed collaborative efforts.

What is collaborative capacity?

Collaborative capacity, as it relates to interagency collaboration, resonates in the work of a number of academics and practitioners (e.g., Bardach, 1998; Huxham, 1996; Mowery, Oxley, & Silverman, 1996; Seidman, 1970). *Collaborative capacity is the ability of organizations to enter into, develop, and sustain inter-organizational systems in pursuit of collective outcomes.* A capacity for collaboration enhances the probability of mission completion by leveraging dispersed resources. The benefits of developing collaborative capabilities include: cost savings



through the transfer of smart practices; better decision making as a result of advice and information obtained from colleagues; enhanced capacity for collective action by dispersed units; and innovation through the cross-pollination of ideas and recombination of scarce resources (Hansen & Nohria, 2004).

Development of a Model of Collaborative Capacity

Drawing on relevant literature and other experts in the field, we deductively developed a framework to map the conditions for effective interagency collaboration. We try to capture the dynamic interaction among all of these factors in the image presented in Figure 1. This diagram shows two organizations (A and B) facing a problem in which they have some interdependent interest or responsibility. Each organization can be represented in terms of the five organization design components derived from Galbraith (2002). The arrows indicate the dynamic interaction among the system elements both within and between organizations as they contribute to the collaborative capability to meet inter-organizational goals.

The dynamic interactions occur in at least three domains. First, effective collaborative capacity requires that the five system design categories (Strategy, Structure, Incentives, Lateral Mechanisms and People) for each participating organization be aligned with each other and with the environmental requirement or challenge (cf. Nadler & Tushman, 1980). This is reflected in the arrows within each of the three pentagons. However, because the problem assumes interdependence among multiple organizations, developing collaborative capacity cannot be accomplished by focusing solely on the dynamics within each organization. Alignment also needs to occur among the system elements *across* organizations. Finally, temporary or permanent interagency structures are frequently established to better enable the collaborative response to the common problem. In such a case, a third domain of interaction needs to be developed so that the design characteristics of the interagency task force or team are not only internally consistent, but also are aligned with the primary organizations they represent (Hocevar, Thomas, & Jansen, 2006).

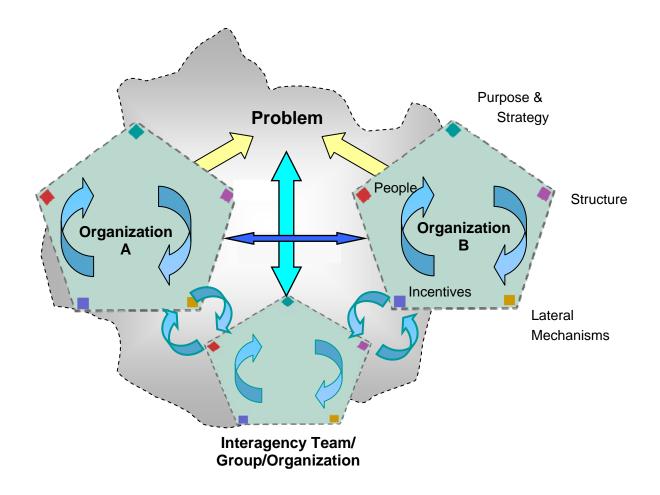


Figure 1. Developing Organization Design Dynamics to Improve Collaborative Capacity: an Innovative Strategy for DHS

ENABLERS AND BARRIERS TO DEVELOPING INTERAGENCY COLLABORATION

Lewin's "force field" analysis model, developed over 50 years ago, is still viewed as the prominent way of explaining the forces of a change process (McShane & Van Glinow, 2005). In this case, Lewin's model provides a framework for examining the enablers and barriers to developing interagency collaboration. In a study of senior leaders in homeland security, Hocevar, Thomas, and Jansen (2004) identified key factors that explain success (enablers) and barriers to inter-organizational collaboration (see Figure 2). The left-hand column names the organization design component as identified in our systems model above. The column identified as "driving forces" lists the factors that contribute most to successful inter-organizational collaboration. The column identified as "restraining forces" includes the factors that impede collaboration.

The model demonstrates how driving forces and restraining forces work to maintain an equilibrium or status quo effect. If an organization chooses to increase its collaborative capacity, it must create a condition where the driving forces are stronger than the restraining



forces. This would mean that the driving forces must be strengthened and/or the restraining forces must be weakened or removed.

Figure 2. Force Field Analysis for Building Collaborative Capacity

	DRIVING FORCES	RESTRAINING FORCES	DESIRED
			END
			RESULT
Organization	"Success" factors	"Barriers" that inhibit	
design component	that contribute to collaborative capacity	collaborative capacity	
Purpose & strategy	 "Felt need" to collaborate Common goal or recognized interdependence Adaptable to interests of other organizations 	 Divergent goals Focus on local organization over cross-agency (e.g., regional) concerns Lack of goal clarity Not adaptable to interests of other organizations 	Collaborative capacity that leads to high performance
Structure	 Formalized coordination committee or liaison roles Sufficient authority of participants 	 Impeding rules or policies Inadequate authority of participants Inadequate resources Lack of accountability Lack of formal roles or procedures for managing collaboration 	
Lateral mechanisms	 Social capital (i.e., interpersonal networks) Effective communication and information exchange Technical interoperability 	 Lack of familiarity with other organizations Inadequate communication and information sharing (distrust) 	

Incentives

People

- Collaboration as a prerequisite for
 - prerequisite for funding or resources
- Leadership support and commitment
- Absence of competitive rivalriesAcknowledged benefits of
 - collaboration (e.g., shared resources) Appreciation of
- others' perspectives
 Competencies for
- collaboration
- Trust
- Commitment and motivation

- Competition for resources
- Territoriality
- Organization-level distrustLack of mutual respect
- Apathy

- Lack of competency

- Arrogance, hostility,

animosity

Enablers to Success

"Purpose and strategy" can be driven by a commonly perceived risk or threat ("felt need") or a common goal such as improving information sharing or coordinated training. Accomplishing a shared purpose is enabled by the third factor in this category—the willingness to adapt the collaborative effort to the needs and interests of other participating organizations.

The "structural" component includes the formal power and authority of those engaged in an inter-organizational collaboration. We found that successful inter-organizational collaborations had formalized coordination of liaison roles, and players had sufficient authority.

"Lateral Mechanisms" are another factor that contributes to success. Social capital represents the interpersonal trust and exchange orientations that come from human interaction, which provides an important foundation for civic behavior (e.g., Adler & Kwon, 2002; Putnam, 2000). We classified social capital as a lateral mechanism within the organization design framework. Effective communication also was identified as a related lateral mechanism. Some characterizations of effective communication include: timely dissemination of information, free flow of information, and the establishment of communications systems and processes across organizations. Effective communication, along with the increased familiarity that comes with interpersonal networks, provides an important means for collaboration. In addition to human communication, technical interoperability contributes to success.

"Incentives" was the fourth category of success factors. In our study, collaboration often was a prerequisite for obtaining resources. For instance, agencies might be required to develop a multi-agency coalition in order to receive a grant. While this does not guarantee success, it creates an opportunity to develop other important collaborative capabilities. Collaborating in the development of a grant proposal is a focused, time-limited activity with clearly identified "payoffs." The process of this effort can generate a better understanding of other organizations' interests and capabilities, create social capital as interpersonal relationships are developed, and set the stage for the creation of temporary or permanent structures for collaboration and information exchange. Incentives to collaborate can be achieved through mandates or external requirements for funding (Cummings, 1984). Another frequently mentioned incentive to collaborate was strong leadership. A leader who clearly expresses commitment to a vision of



ACQUISITION RESEARCH: CREATING SYNERGY FOR INFORMED CHANGE

collaboration with other agencies can provide an important incentive for other organizational members to engage in this "new" activity. This is similar to the acknowledged role of leadership in effective change management (e.g., Kotter, 1990). Other success imperatives included an absence of competitive rivalries and an acknowledgement of the benefits of collaborative efforts.

The last category of success factors is "People." A primary characteristic of those who participated in successful collaborative efforts was an appreciation of others' perspectives. In other works, players were able to step outside their own narrow interests and appreciate other's views. Players appeared to have developed competencies for collaboration and were able to build trust among the various players. Commitment and motivation were also keys to success.

Barriers to Collaboration

The identified barriers to collaboration substantially reinforce the factors identified as contributing to success, even though they are not an exact replication of the capabilities described above.

Under "Purpose and Strategy," divergent goals were mentioned as an impediment to inter-organizational collaboration. Related to that was lack of goal clarity. Opposed to the earlier success factor of recognizing other's interests, barriers arose when players focused on their own organization's interests at the expense of a broader set of interests or a common goal. Even when others' interests are recognized, the unwillingness or inability to adapt to interests of the other organizations was another barrier.

While mentioned less frequently, other barriers to effective inter-organizational collaboration were classified as Structural. Specific examples include: procedural prohibitions such as security classifications, lack of formal roles and procedures to enable collaboration, inadequate authority of participants to engage in negotiation or decision-making on behalf of their organization, and lack of accountability. Most of these are indicators of problems that can exist in "under-designed" systems (Cummings, 1984). Because well-established, institutional mechanisms for coordination are unlikely to exist or are likely to be underdeveloped in extraorganizational relationships, the importance of leadership, followership, and colleagueship (i.e., the capacity for mutual adjustment) is increased.

Two barriers were identified in the category of "Lateral Mechanisms." "Lack of familiarity with other organizations" and "Inadequate communication and information sharing" both represent missing enablers of collaboration. Some participants identified distrust as a cause of inadequate communication. Distrust was sometimes characterized at the organizational level, as in "the organizations have a history of distrust." As an organization-level phenomenon, we also view this as a disincentive to collaboration and, thus, categorized this factor as a barrier under "Incentives." Other times, the participants attributed distrust to individuals; in this case, we categorized the factor into the design dimension of "People." Behaviors that are both instigators and symptoms of distrust included "Arrogance, hostility, and animosity" in the People category and "Lack of mutual respect" when attributed to organizations (in the Incentives category).

Two other frequently cited barriers were "Competition for resources" and "Territoriality and turf protection." These two factors were categorized as (dis)incentives. These factors are related to the Lateral Mechanisms and People factors described above. While the causal relationship is not definitive, a clear relationship exists among competition/territoriality and lack



of familiarity, inadequate communication, and distrust. Together, these system dimensions can create a continuing cycle of dysfunction. When organizations are competitive, distrustful, or just unfamiliar with each other, this can impede necessary communications. The inadequacy of communications, in turn, continues the lack of familiarity, or in the more extreme cases, can increase distrust. This suggests that specific interventions to disrupt this cycle and shift the alignment toward constructive interactions are necessary to build collaborative capacity.

COLLABORATION-READINESS ASSESSMENT

Our current focus is the development of a collaboration-readiness assessment. The purpose of this phase of the research is to develop an assessment instrument to measure organizations' collaboration readiness. This instrument will allow organizations to assess their capacity to engage in collaborative efforts and then provide specific activities for improving their collaborative capacity.

This diagnostic tool will derive from our collaborative capacity conceptual model and provide a means of measuring and assessing an organization's collaborative capacity. The diagnostic tool is valuable in a number of ways:

- 1) It allows organizations to establish baseline measures and chart their development over time. Management can determine its collaborative capacity trajectory. In other words, where are they now? Where would they like to be? How long should it take to get there?
- 2) It enables organizations to become "collaboration literate." The use of the tool introduces key terms and ideas related to inter-organizational collaboration.
- 3) Interventions can be developed to move the organization from where they are to their desired position. This might include selection of individuals with collaborative competences to pivotal roles that work across organizational boundaries. It might include training and management development.
- The assessment process becomes a tool for creating dialog among organizational members about the value and development of collaborative capacity.

While our initial work to establish the model presented here was done in the domain of inter-agency collaboration for homeland security and defense, we see opportunities for its application in other areas (such as acquisition) where the quality of inter-organizational interactions can have significant impact on the quality of the defense product. Our goal is to design a readiness assessment tool that can be tailored to the specific collaboration requirements of different communities of practice. Our future research goals include the application and evaluation of the assessment tool in varying case environments.

BIBLIOGRAPHY

Adler, P. S. & Kwon, S. (2002). Social capital: Prospects for a new concept. *Academy of Management Review, 27*(1), 7-40.

Bardach, E. (1998). Getting agencies to work together: The practice and theory of managerial craftsmanship. Brookings Institution Press.



- Cummings, T. G. (1984). Transorganizational development. In B. M. Staw & L. L. Cummins (Eds.), Research in organizational behavior (Vol. 6, pp. 367-422). Greenwich, CT: JAI Press Inc.
- Galbraith, J.R. (2002). Designing organizations: An executive briefing on strategy, structure and process. San Francisco: Jossey-Bass.
- Hansen, M.T. & Nohria, N. (2004). How to build collaborative advantage. MIT Sloan Management Review, 46(1), 22-30.
- Hocevar, S., Thomas, G.F., & Jansen, E. (forthcoming 2006, November). Building collaborative capacity: An innovative strategy for homeland security preparedness. In M.M. Beyerlein, D.A. Johnson, and Beyerlein, S.T. (Eds.), Innovation through collaboration. New York: Elsevier.
- Hocevar, S., Jansen, E. & Thomas, G.F. (2004). Building collaborative capacity for homeland security. Naval Postgraduate School (Technical Report NPS-GSBPP-04-008). Monterrey, CA: Naval Postgraduate School.
- Huxham, C. (1996). Collaboration and collaborative advantage. In C. Huxham (Ed.), Creating collaborative advantage (pp. 1-18). London: Sage Publications.
- Kotter, J.P. (1990). A force for change: How leadership differs from management. New York: Free Press.
- Mankin, D., Cohen, S., & Fitzgerald, S.P. (2004). Developing complex collaboration: Basic principles to guide, design, and implementation. In M.M. Beyerlein, D.A. Johnson, & S.T. Beyerlein (Eds.), Complex collaborative: Building the capabilities for working across boundaries (pp. 1-26). New York: Elsevier.
- McShane, S.L. & Von Glinow, M.A. (2005). Organization behavior (3rd ed.). New York: McGraw-Hill Irwin.
- Mowery, D.C., Oxley, J.E., & Silverman, B.S. (1996). Strategic alliances and interfirm knowledge transfer. Strategic Management Journal, 17, 77-90.
- Nadler, D.P. & Tushman, M.L. (1980). A model for diagnosing organizational behavior: Applying a congruence perspective. Organizational Dynamics, 9(2), 35.
- Putnam, R.D. (2000). Bowling alone: The collapse and revival of American community. New York: Simon & Schuster.
- Seidman, H. (1970). Politics, position and power: The dynamics of federal organization. New York: Oxford University Press.
- United States Government Accountability Office. (2002, December). Homeland security: Management challenges facing federal leadership. GAO-03-260. Washington, DC: author.



THIS PAGE INTENTIONALLY LEFT BLANK



2003 - 2006 Sponsored Acquisition Research Topics

Acquisition Management

- Software Requirements for OA
- Managing Services Supply Chain
- Acquiring Combat Capability via Public-Private Partnerships (PPPs)
- Knowledge Value Added (KVA) + Real Options (RO) Applied to Shipyard Planning Processes
- Portfolio Optimization via KVA + RO
- MOSA Contracting Implications
- Strategy for Defense Acquisition Research
- Spiral Development
- BCA: Contractor vs. Organic Growth

Contract Management

- USAF IT Commodity Council
- Contractors in 21st Century Combat Zone
- Joint Contingency Contracting
- Navy Contract Writing Guide
- Commodity Sourcing Strategies
- Past Performance in Source Selection
- USMC Contingency Contracting
- Transforming DoD Contract Closeout
- Model for Optimizing Contingency Contracting Planning and Execution

Financial Management

- PPPs and Government Financing
- Energy Saving Contracts/DoD Mobile Assets
- Capital Budgeting for DoD
- Financing DoD Budget via PPPs
- ROI of Information Warfare Systems
- Acquisitions via leasing: MPS case
- Special Termination Liability in MDAPs

Logistics Management

R-TOC Aegis Microwave Power Tubes



- Privatization-NOSL/NAWCI
- Army LOG MOD
- PBL (4)
- Contractors Supporting Military Operations
- RFID (4)
- Strategic Sourcing
- ASDS Product Support Analysis
- Analysis of LAV Depot Maintenance
- Diffusion/Variability on Vendor Performance Evaluation
- Optimizing CIWS Life Cycle Support (LCS)

Program Management

- Building Collaborative Capacity
- Knowledge, Responsibilities and Decision Rights in MDAPs
- KVA Applied to Aegis and SSDS
- Business Process Reengineering (BPR) for LCS Mission Module Acquisition
- Terminating Your Own Program
- Collaborative IT Tools Leveraging Competence

A complete listing and electronic copies of published research within the Acquisition Research Program are available on our website: www.acquisitionresearch.org





ACQUISITION RESEARCH PROGRAM GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY NAVAL POSTGRADUATE SCHOOL 555 DYER ROAD, INGERSOLL HALL MONTEREY, CALIFORNIA 93943